1	UNITED STATES NUCLEAR REGULATORY COMMISSION
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3	BRIEFING ON OFFICE OF NUCLEAR MATERIALS SAFETY AND
4	SAFEGUARDS (NMSS) PROGRAMS, PERFORMANCE, AND PLANS
5	MATERIALS SAFETY
6	++++
7	WEDNESDAY
8	FEBRUARY 8, 2006
9	++++
10	The Commission convened at 9:30 a.m., Nils J. Diaz, Chairman,
11	presiding.
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13	NUCLEAR REGULATORY COMMISSION:
14	NILS J. DIAZ, CHAIRMAN.
15	EDWARD MCGAFFIGAN, JR., COMMISSIONER
16	JEFFREY S. MERRIFIELD, COMMISSIONER
17	GREGORY B. JACZKO, COMMISSIONER
18	PETER B. LYONS, COMMISSIONER
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2	PRESENT:
3	MR. LUIS REYES, EDO
4	JACK STROSNIDER, DIR, NMSS
5	ROBERT PIERSON, DIR, FCSS, NMSS
6	MARGARET FEDERLINE, DDIR, NMSS
7	CHARLES MILLER, DIR, IMNS, NMSS
8	JOSEPH HOLONICH, DIR, PMDA, NMSS
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1	PROCEEDINGS
2	CHAIRMAN DIAZ: Good morning. I know that we have a lot of
3	things to cover at this meeting, which has now become a recurrent way of
4	keeping the Commission informed and the public informed about all of the
5	good things that NMSS is doing, although we know we divided this meeting
6	into two sections because you guys have too many to ways to use your skills.
7	Is that the right way of saying it? I don't think so. But anyhow, I don't want to
8	take too much time because I know we have a lot of things to work out. I am
9	looking forward the presentation of the staff and the discussion.
10	Do my fellow commissioners have any comments? If not, Mr.
11	Reyes?
12	MR. REYES: Good morning, Chairman and Commissioners.
13	The staff is here this morning to brief the Commission on our Nuclear
14	Materials Safety and Safeguard Programs.
15	You may remember that earlier this year, we briefed the
16	Commission on decommissioning activities. Today, we will briefing on
17	materials safety, and next week we'll be briefing on waste safety.
18	I think, the fact that we had to do it in several meetings speaks
19	for the scope and activity level that the program has and what the staff has
20	been performing.
21	The theme today of our presentation is Planning for Success.
22	We are trying to anticipate all the challenges in the future that
23	will hopefully give you an insight of, what we are doing to anticipate and be
24	prepared for those challenges.
25	I will just turn over the meeting to Jack, who is going to

introduce the presenters.

Τ	MR. STROSNIDER: Thank you Luis. Chairman,
2	Commissioners, good morning. With me today at the table are Bob Pierson,
3	Director of the Division of Fuel Cycle Safety and Safeguards; Margaret
4	Federline, Deputy Director, Office of Nuclear Materials Safety and
5	Safeguards; Charlie Miller, Director of the Division of Industrial and Medical
6	Nuclear Safety; and Joe Holonich, who is the Director of the Division of
7	Program Management, Policy Development, and Analysis. Also with us
8	today are George Pangburn from Region 1, Doug Collins from Region 2, and
9	representatives from the Office of State and Tribal Programs, the Office of
10	Nuclear Regulatory Research, the Office of General Counsel, and other
11	offices.
12	I point here is that the Material Safety Program cuts across
13	many parts of NRC, and we work closely as a team to assure its effective
14	implementation.
15	Slide 2.
16	This slide presents topics that we plan to cover today.
17	I'll begin with a very brief summary of some of the major
18	Material Safety Program accomplishments. However, I don't plan to spend
19	much time on our accomplishments. I believe our record stands on its own.
20	What I want to focus on is our approach in planning for future success. I'll
21	discuss our philosophy for achieving success, as well as the model we use in
22	our planning for success.
23	Following that, Bob, Charlie, and Joe will discuss areas that we
24	need to focus on to achieve continued success in the areas of fuel cycle
25	facilities, nuclear material users, and management excellence.
26	The next slide.

1	Actually, the next five slides highlight some of the major
2	accomplishments in the areas of fuel cycle facilities, nuclear material users,
3	and management excellence.
4	As I said, I'm not going to discuss them in detail; we will just
5	show each of these slides briefly so you can see some of the major
6	accomplishments.
7	While you are looking at these, I do want to note that our main
8	priority of assuring public safety, security, and protection of the environment
9	is achieved through our day-to-day rule rulemaking, licensing, inspection, and
10	oversight activities.
11	These slides just highlight some of our major accomplishments.
12	I also would like to point out, as you look at them, though, that many of these
13	represent unique and often first-of-a-kind challenges.
14	So if we can go to Slide 7. As indicated, we have had a number
15	of successes. We take pride in these, and I believe they show we on the
16	right track.
17	But as Will Rogers said, "while it's good to be on the right track,
18	be careful not to stand still because you will get run over."
19	We realize that the regulatory environment is continually
20	changing and that we need to anticipate and prepare for new challenge that
21	the future will bring. Some challenges we can predict with reasonable
22	certainty. However, others have a great deal of uncertainty, and some, we
23	can't predict at all.
24	While we can plan for those scenarios that we can reasonably
25	predict, given the uncertainties about the future, we believe trying to predict
26	one scenario for the future and focusing on that one scenario would be a

formula for failure.

Rather, we believe the path for success is to build an organization that has the capacity and the flexibility to address the wide spectrum of possible future challenges.

Next slide, please.

With regard to future challenges, they can come from a variety of sources. We must continually monitor licensee performance and adjust our programs to address both good and bad performance.

Licensees will continue to pursue new business initiatives that will have implications for of our programs. New legislation can have significant implications for our programs, the Energy Policy Act of 2005 being a good example.

We must be prepared to assess safety and take appropriate licensing actions for new fuel cycle technologies and new medical modalities. While we made great strides in the area of security, we must be continually vigilant. And needless to say, we must always strive to make the most effective and efficient use of our resources.

Slide 9.

An organization's capacity to deal with new challenges and to effectively accomplish its mission depends on a number of elements. These include its aspirations, that is, having a clear vision, common sense, purpose, and goals; strategies, referring to a coherent set of actions and programs for achieving these goals; organizational skills, meaning the ability to plan, to manage resources, an to measure performance; human resources, our need to maintain high-quality diverse management and staff with the collective capabilities necessary to accomplish our mission; system and infrastructure,

- which includes regulations, regulatory guides, administrative, information
- technology, and physical assets needed to support the organization;
- organizational structure, that is, an organization designed to support the
- 4 mission; and culture, meaning our shared practices, values, and commitment
- 5 **of the organization**.
- 6 We use this model in planning for future success. For each of
- 7 the subprograms in the area of materials and waste, we considered a range
- 8 of possible future scenarios, as well as we understand them, and we
- 9 evaluated subprograms against each of the elements in this model to
- determine what actions we need to take to make these programs successful
- in the future.
- The advantage of this approach is that it provides a
- comprehensive view of what is needed to get the job done.
- Organizations often focus on a subset of these elements, but
- they are all necessary to be a truly high-performing organization.
- 16 What I have provided is a high-level description of our
- philosophy and our approach to planning for success.
- Now I will turn it over to Bob, Charlie, and Joe. Their
- presentations will provide more specifics with regard to the results of our
- applying this philosophy and this approach to assessing program areas. With
- 21 that, I'll turn it over to Bob.
- MR. PIERSON: Good morning. What I would like to do this
- morning is talk to you about the fuel cycle area. And, in general, the fuel
- 24 cycle area is looking at significant growth in all sectors.
- 25 What I would like to do with that is talk to you about some of the
- more prominent areas and then describe to you what the challenges are for

those particular areas, and then talk to you about the scenarios and how we are going to meet those challenges.

The first one is reprocessing/recycling technologies. As you are probably aware, the Department of Energy today -- actually, earlier this week -- announced a new initiative to begin a national program to look at recycling as an option for closing the nuclear fuel cycle.

We feel it is important for the Nuclear Regulatory Commission to be involved early in that process, to allow safety to be implemented into those designs early on so that the regulatory process reflects that, and so that we can use that as a mechanism to achieve safety and make it a more assured likelihood that the technology will be implemented.

I think that is particularly important.

This is a significant challenge for us as a agency, because I think if you look at that Department of Energy initiative that was laid out, it involves not just reprocessing, but a number of other technology applications beyond reprocessing to achieve that closed fuel cycle process.

It includes things like transmutation, what would probably be a fast spectrum reactor, which could involve the utilization to effectively burn the transuranic actinides; it involves technology to separate long lived effusion products.

The process seems to be that the Department of Energy is looking at two things: One is to close the fuel cycle and the other is to address the long-term waste disposal issues associated with Yucca Mountain. Those would be a significant challenge for us in this agency to regulate. We think that involving ourselves early to develop the regulatory process and do that is paramount.

1	I think it is important to note that the regulatory process as laid
2	out today would be under 10 CFR Part 50. I think that it would be very
3	awkward and difficult to achieve that regulatory process with that current
4	regulation.
5	So we would be talking about some sort of a regulatory
6	maybe a new regulation, maybe a modification of 10 CFR Part 70.
7	Something of that nature.
8	We are in the process of developing a Commission paper to
9	inform you, at least at this stage, of where we think we are at, and provide
10	some options and recommendations. Hopefully, that should be to you
11	shortly.
12	The next area that I think is worth addressing is advanced
13	enrichment technologies. As I'm sure you are aware, we do and we are
14	reviewing some gas centrifuge technology applications for generating a SWU
15	in the U.S. to replace the capacity at Paducah when it's envisioned that
16	Paducah will be shutting down soon.
17	But there are a number of other technologies that are not yet
18	developed, I guess, in the commercial sector. Licensees have spoken to us
19	about it. We have two in particular. I don't want to go into a lot of detail in
20	this meeting, although I'd be happy to talk to you in a more closed forum
21	because the information is sensitive. But it is something, again, we have to
22	prepare our staff to be able to address, to prepare ourselves to be able to
23	work and to be in a position to allow that review to take place if and when it
24	comes in.
25	Moving on to the next one, it's the mixed oxide fuel fabrication.

This has been a challenge for the staff. I think it is particularly interesting to

1	me to watch the staff react through this process because many of the
2	technologies we are regulating, if we've regulated them at all, it has been
3	beyond the generation of the present staff that's doing the regulatory reviews.
4	In many cases, what we are being asked to do is make safety
5	decisions where really, to assign the sort of I guess, the margin of safety
6	that most of the staff or many of the staff would be intrinsically comfortable
7	with is difficult to achieve and still allow the technology to move forward.
8	So what you are doing is, you're trying to optimize the process.
9	You're trying to achieve safety. It is essentially a real application of a
10	risk-informed process.
11	It is not easy for everyone to accept, and it's not easy for
12	everyone to apply. These technologies don't lend themselves to quickly and
13	easily accomplishing that. It is not, the pump is on; the pump is off. It's
14	usually a chemical reaction that depends on pH. It can be variable over the
15	course of the reaction.
16	That's been a challenge for us, but I think we are working
17	through that and I think we are doing a good job. We will take the lessons we
18	have learned from that, and should we be involved in reprocessing/recycling,
19	we would intend to apply those lessons to that technology.
20	The next area I want to talk about is a growth in uranium mining.
21	You are probably aware that the price of uranium has grown significantly
22	since the 2000-2002 time frame. Right now, when I last looked, it looks like
23	it's about \$37 a pound. That is attracting a lot of investors in the ISL

We have two parties that are actively engaged with us about potentially appearing for new licenses in probably the early 2008 time frame.

community in the United States.

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1	It may not sound like a lot, but it's a 50% increase over what we
2	regulate today.
3	Now, in addition to that, we are aware from our contacts at the
4	National Mining Association and with the industry, that there are probably ten
5	to fifteen additional parties, entities, corporations that are interested in
6	pursuing applications of this technology in, say, the next two-to-five-year time
7	frame.
8	That begs for something to be done with 10 CFR Part 40. And I
9	think there's already I'm aware of a COM that you're generating, and we
10	support that initiative.
11	We also are in the process of looking at a paper in fact, we
12	are drafting a paper to suggest something along the same lines, because
13	there is no question about it that, given our present regulatory situation, we
14	would be seriously overextended to try to license 12 facilities under the
15	present regulatory process.
16	As you probably know, we don't have clear regulatory guidance
17	in this area. Essentially, what we're doing is, we are doing customized
18	license conditions for each ground water situation. And it just is not working
19	well. We need to do better than this.
20	The next area that I would like to talk about is new facilities
21	inspection. This represents a new challenge for us in the NRC. We have
22	had construction inspection done on the reactors. But as probably most of
23	you know, that probably ended with Watts Bar in the mid 1980's.
24	So we are in the process now of taking these mostly senior staff
25	members and using their knowledge to craft an inspection process for MOX

and the gas centrifuge. It is important, particularly in the case of MOX, that

1	we do this and that we do this effectively, timely, and we address all the
2	issues because, in many cases, the construction and the performance of that
3	construction in the appropriate manner allows the safety judgments that we
4	have made in the license applications to be realized. So we need to be able
5	to follow through on that. We are writing procedures. We interface with
6	Region 2. I think we made good process on that, but it is a challenge for the
7	staff.
8	Now, given these challenges, how do we propose to achieve
9	success?
10	COMMISSIONER MCGAFFIGAN: Mr. Chairman, could I just
11	ask one clarification?
12	MR. PIERSON: Yes, sir.
13	COMMISSIONER MCGAFFIGAN: In addition to the
14	construction inspection, are you planning at the MOX and the centrifuge
15	facilities to have resident inspectors?
16	MR. PIERSON: We plan to have a resident inspector at the
17	MOX, but we do not plan to have a resident inspector at the centrifuge
18	facilities.
19	COMMISSION MCGAFFIGAN: Okay.
20	MR. PIERSON: Now, how are we going to achieve that
21	planning for success?
22	Looking at the organizational capacity model, we have a
23	number of different ideas for how to accomplish that. The first under the
24	guise of "strategy," would be risk-inform the licensing and oversight process.
25	I can't emphasize that enough because without understanding where you
26	need to devote your resources, you can't keep up with the workload. There's

- 1 no way that you can keep up with the wave. It will overwhelm you.
- The next thing is skills. This is a constant challenge for us. We
- have, broadly speaking, in the areas of criticality, plutonium chemistry,
- 4 uranium chemistry, hydrology, and other technologies, we have difficulty
- 5 **hiring staff**.
- In fact, this week, we have a couple of my staff at the University
- of Tennessee working with the Nuclear Engineering Department there, doing
- 8 some colloquiums. We try to get engaged with the graduate students and
- 9 students early on, to bring them on as potential criticality engineers in the
- 10 future.
- The other issue here is knowledge manager. How do we
- capture the knowledge that we have in our existing staff and translate that in
- a manner that can be utilized by the new staff?
- We have a series of things that we are initiating, one of which is
- conducting seminars, where we have essentially devoted a couple of hours in
- the afternoon and work through a particularly interesting area or problem and
- have the older -- I don't want to say the old folks, but the older, more
- experienced personnel on the staff provide their insights to the younger
- people in terms of what to do, how they did it, why they made the decisions
- 20 they made.

- The last one we did was related to the incident we at Sequoyah,
- with the UF6 release there.
- Following down the list, then, the next issue is resources. We
- are reasonably sure that resources, no matter how you project the future, no
- 25 matter how you anticipate what's coming down, that resources are going to
- 26 be constrained.

So the question is, how do you maximize the potential for your
resources you do have? And we think that, given the uncertainties we have
in our organization and projecting the future, you can't really go out to a large
degree and hire a specific expertise.

You hire a specific expertise to do the job. More than that, you need inquisitive, intelligent, curious people to be able to look to the future to figure out what the job is that we don't even know exists yet today. That would reflect back to this advanced enrichment technology.

If you had asked me about that 18 months ago, I would not have known the technology exists. But now, we could potentially be asked to regulate it. We need to hire people that are flexible, that can rise to the challenge and accomplish that.

How do we do that? We work through the infrastructure. We involve stakeholders. We talk internationally. We involve ourselves in a number of different ways. We're working with the Japanese, and the Japanese are applying the ISA process to the Rokkasho Reprocessing Facility. So they've essentially taken, in large measure, our ISA process, which we never applied to a reprocessing facility. And they're applying it.

We have had several meetings with them, and we are having a good, ongoing dialogue with them to learn from their experience and apply our regulatory process to a reprocessing facility. That is the kind of thing we need to capitalize on in the future and build to make this process successful.

The last thing is culture. How do you make that happen? One, you have to invigorate the people and make them enthusiastic about what they're doing. You have to risk-inform, inculcate a sense of enough is enough in terms of licensing reviews, and the willingness to look into the future and

Τ	anticipate what we can do, and do the best job we can.
2	So with that, I will turn it over to Charlie Miller.
3	MR. MILLER: Thank you, Bob. May I have slide 12, please.
4	Good morning, Chairman and Commissioners.
5	Today, I would like to focus on three challenge that we have
6	ahead of us in the materials area. First is the implementation of the Energy
7	Policy Act.
8	The Energy Policy Act has significantly increased our authority
9	and responsibility. To meet this challenge, we have created an NMSS
10	Energy Policy Act Task Force to address the provisions relating to naturally
11	occurring and accelerator-produced radioactive material, otherwise known as
12	NARM. The task force has developed a technical basis to support the
13	rulemaking and is developing the transition plan for the transfer of authority
14	over NARM.
15	This task force includes representatives from all walks of NRC
16	life; not only NMSS, but we've got great cooperation from other offices and
17	the regions, as well as the Agreement States in the CRCPD, to participate
18	and help us in this endeavor.
19	In addition, the Division of Industrial and Medical Nuclear Safety
20	is writing a rule to expand the definition of byproduct material and developing
21	the guidance necessary for the implementation of the rule, as well as other
22	rules. The proposed NARM rule will be provided to the Commission in March
23	of this year.
24	Next, I would like to talk about the control of radioactive
25	sources. And I know this is an item of extreme interest to the Commission.
26	We have continued our emphasis on the control of sources to

Τ	ensure that radioactive sources are safely and securely managed by all
2	licensees.
3	We have issued orders to our licensees, and the Agreement
4	States have also issued legally binding requirements. The inspection of
5	licensee programs are prioritized in a risk-informed manner. IMNS and
6	Program Management and Policy Development and Analysis staff are
7	developing a National Source Tracking System to improve accountability.
8	The final rule will be provided to the Commission in April of this year.
9	In addition in March, we will be providing the Commission with a
10	paper on the staff's recommendations for the control of sources that are
11	below category 2 thresholds.
12	IMNS will proceed to codify, increase controls, and other
13	security initiatives through rulemaking. In addition, IMNS continues as the
14	staff lead on the Radiation Source Protection and Security Task Force.
15	The third area that I would like to discuss is our increased NRC
16	and Agreement State collaboration.
17	As you know, NMSS, especially IMNS, works extremely closely
18	with Janet Schlueter in the Office of State and Tribal Programs.
19	We work together through working groups and steering
20	committees involving the Agreement States, and also trying to get them
21	involved in other program activities that we also have going along with them,
22	as well.
23	We believe we have made significant progress in developing an
24	effective working relationship with the Agreement States. The Energy Policy
25	Act and other factors have led more States to express interest in becoming

Agreement States. We anticipate that the timing of the new applications and

1	agreements will lead to increased budgetary uncertainty for NMSS, the
2	regions, and OSTP as we plan accordingly.
3	May I have the next slide, please.
4	The increased and decreased use of materials is also very
5	much on the front burner. We anticipate that there are going to be areas
6	where there is an increase and decrease in the use of nuclear material, with
7	the continuing evolution of things like medical technology and other
8	modalities which will lead to a changing environment in the sealed source
9	and device reviews, and also the possibility of finding other technologies that
10	might replace nuclear technologies.
11	The latter is an initiative being undertaken by a subgroup on the
12	Federal task force on alternative technologies, and the National Academy of
13	Sciences Study is being sponsored by the Office of Research.
14	Revision to our International Radiation Protection Standards is
15	also extremely important to us. There is very active interest on the part of
16	IAEA to revise the basic safety standards.
17	The United States and other member states want to ensure that
18	this is done in a methodical manner and that it includes consideration of the
19	appropriate issues, such as the forthcoming ICRP recommendations.
20	Next slide, please.
21	How are we going to try to strategize to achieve successes?
22	First, our strategy is to continue to engage our Federal
23	agencies, the States, as well as the domestic and international stakeholders
24	to try to influence the direction of international standards and anticipate
25	material users' needs.
26	In doing so, we plan to use information technology to try to

1	achieve more efficiency in our processes, while maintaining safety and
2	security.
3	The skills we will need are focused in two areas. First, because
4	we have not regulated this area in the past, we need to gain some expertise
5	in accelerator-produced materials technology.
6	In addition, we have to continue to fill our pipeline of health
7	physicists. This is a challenge for us.
8	With regard to resources, the increased responsibility given to
9	us by the Energy Policy Act could be potentially counterbalanced by the
10	potential increase in the number of Agreement States. We don't know yet
11	what that balance will be, but both factors will work against each other.
12	Our infrastructure, in trying to plan and promote our regulations
13	in the safety and security areas, are in accordance with the Energy Policy Act
14	and will allow to us build licensing guidance as we promulgate rules.
15	Inspection and enforcement program guidance will be developed as needed.
16	Because of the budgetary constraints, guidance development
17	has not been a high priority over the last number of years. However, we need
18	to make it one. With the development of the new regulations that we must
19	promulgate and the ever-increasing need for knowledge management, we
20	have to focus our attention on updating guidance as well as developing new
21	guidance to accommodate the rules.
22	As we move forward with the potential increase in the number
23	of Agreement States and the corresponding decrease in the NRC fee base,
24	we may have to reevaluate in the future the agency's byproduct material
25	organizational structure.

Our culture. Our culture is primarily one of flexibility, especially

in the rulemaking area.

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Because of the continuing need for rulemakings and the continuing need for prioritization of rulemakings, I have a rulemaking staff that has become very flexible and able to adapt to different situations.

I'm going to turn the talk over to Joe now.

MR. HOLONICH: Thank you, Charlie.

In the area of management excellence, NMSS sees that we have three challenges that are facing us.

We have changing and growing programs, and as Bob and Charlie talked a little bit about the technical aspects of it, we look at, from an office perspective, the uncertainties and the new needs that these changes and the new programs bring to the office, and what we can do to be proactive to make sure the technical divisions have what they need to be able to operate in that changing regulatory environment.

We also have a challenge of cross-cutting processes for the office. The office has six divisions in it; five technical. Each one of those technical divisions have unique areas that they regulate. Unlike NRR, which is an all reactor type of office, we have very unique divisions within NMSS. And we need to look at making sure we have the processes in place that allow these unique divisions to operate as a whole across the office, so that the entire office is operating as one.

And then, finally, the challenge is to make sure we evolve more into information technology and automated approaches to operating the office and having in place those thing that we need to make the office work more efficiently and do away with many of the paper processes that we are still using and bring in automated systems.

1	When you look at what we doing and the activities that we have
2	on slide 16 to help us address these challenges, our strategy is to have an
3	effective program support which provides an office-wide level of support that
4	each of the divisions can use.

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The skills we need are to make sure we plan in advance to have what we need in terms of changing skills as the programs change. As the licensees and applicants change, make sure we have processes that allow us to change the staffing needs to meet those.

We are working with HR to put in place specific tools for NMSS so that we can have the proper planning and selection to get the staff and the technical expertise we need on board.

In the area of resources and infrastructure, we are looking at process improvements and automations, things that we can do to streamline the office operations in term of managing our resources and managing our contract dollars, as well as looking for agency-wide activities.

NMSS recently led an operating plan review to look for consistent operating plans across the major offices -- Research, NSIR, NRR and NMSS.

In terms of organizational structure, we are looking at inter-functional coordination, what can the office do to make sure the divisions and programs operate with an office perspective as well as a program perspective, and look across the activities so that we have coordinated operations, and the resources across the divisions are addressed at an office level, as well as a program level.

In the culture, we see ourselves as a change agent. We are looking forward in identifying what kind of improvements we need, what we

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1	can do in cross-cutting issues, both within the office and across the agency,
2	to make sure that we have coordinated and integrated some very diverse
3	programs to get what we need and operate an effective office.
4	So that is basically what we are doing in management
5	excellence. Let me turn it back to Jack, who will finish it up.
6	MR. STROSNIDER: Thank you, Joe.
7	We presented the results of what we believe is a
8	comprehensive and systematic evaluation of the Materials and Management
9	Excellence Programs.
10	Considering the range of future scenarios, as best we
11	understand them, and identifying actions that we believe are necessary to
12	prepare our organization for meeting these future challenges.
13	As you would expect, there are a number of cross-cutting
14	issues, and we plan to address those in more detail at the end of the Waste
15	Safety briefing on February 14, where we can look across all the programs in
16	the entire office.
17	But I would like to note at this time the need for focus in the

areas of infrastructure, staff development, and organizational skills.

the regulatory guidance, and the analytic tools necessary to address new fuel

cycle technologies and the changing scope of materials regulation. Similarly,

to make our planning, budgeting, and performance monitoring more efficient

we need to develop and maintain staff skills necessary to address these

In the area of infrastructure, we need to develop the regulations,

We also need to look at our organizational skills, including ways

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areas.

and more effective.

1	It's important that we make investments in these areas in order
2	to position ourselves for success in the future.
3	With that, we would like to entertain any questions or
4	discussions on what we have presented.
5	MR. REYES: Chairman, Commissioners, the staff has
6	concluded its prepared remarks. I just want to make two comments in
7	closing.
8	First of all, I want to acknowledge that Charlie Miller had oral
9	surgery yesterday. We used his connection to the medical community. He is
10	heavily medicated, but he wanted to make sure he was here to make his
11	presentation, and we were successful with that.
12	And the second one: I hope that through the presentation, you
13	heard the word "anticipate." The Commission has challenged us as a staff
14	to anticipate the challenges that are forthcoming. Some of them we know,
15	and some of them we don't quite know yet, and we have tried to address that.
16	With that, we are ready for questions.
17	CHAIRMAN DIAZ: Thank you, Mr. Reyes, and I thank each and
18	every one of you for bringing us up to date and presenting us with your view
19	of what you really have to do, which is important.
20	By the way, Charlie, you sound fine to me.
21	MR. MILLER: I'm sure the EDO did not imply, Mr. Chairman,
22	that I needed to be heavily medicated.
23	CHAIRMAN DIAZ: I was wondering about that. Sometimes I
24	wonder whether I need to be heavily medicated, too.
25	Can we just backtrack a minute and think about NMSS, the
26	transitions. Let me just ask a question that I am sure at one time or another

has occupied every one of us.

You have some big issues that come up and take a lot of attention and resources. And then, you have a lot of issues that are not so big that happen every day. And I always worry whether the big fish are eating the little fish and taking the time away. I'm sure you understand what I mean, Jack. What are we doing to make sure that that does not happen?

MR. STROSNIDER: The first thing that comes to my mind when you discuss that is the operating plan that we work to.

We have what I consider a very well developed operating plan that captures not just the big fish but the little fish and allows us to monitor our progress in those areas. We meet quarterly, and we have a number of performance indicators that go down into what I consider a fairly low-level of detail for what's going on in the office. And we trend those from quarter to quarter, and we look at -- if our performance indicators say we need to give attention in one area, then we do that.

I think that is a very effective method for us to capture and manage that work. So I'm comfortable that we are capturing the full scope.

MR. REYES: I want to add that the operating plan gets reported quarterly in terms of discrepancies. If the office is being challenged in achieving anything, whether it's the big fish or little fish, then they get reported to the EDO office, and the deputies and I engage with the office directors to make sure that we are providing whatever needs the office has to make sure we give attention to all issues, regardless of their size.

CHAIRMAN DIAZ: Very good. In terms of the issue of security, we have now the entire agency, including the Commission, day in and day out, being busy, making sure that we take care of the security of all our

facilities and materials.

We are now coming to a point that I believe where a significant number of the issues have either been resolved or there is a plan to resolve them. In the area of nuclear materials and safeguards, some of those issues are coming to an end.

However, there is a problem of continuing to make sure that we are maintaining the security efforts at the right levels, that things are brought up to date when they need to.

And I wonder if, as busy as you have been with this, whether you have put together a plan which allows us to make sure that we continue to look at this area and, at the same time, making sure that we are not escalating unnecessary, but maintaining the performance and the oversight that we need to have over the security area.

MR. STROSNIDER: I think, from my perspective, as we recognize, we have done a lot of work, which you are aware of. I think we have provided the results of evaluations and assessments that have allowed to us take the actions that are appropriate to take.

I think we are looking at the word -- you used the word "maintaining" -- and we are looking at moving into that maintenance mode.

We recognize that, to do that, we need to closely coordinate our activities with Nuclear Security and Incident Response (NSIR). We do that.

We work closely with them and will continue to do that to see if there is anything changing on the horizon where we need to revisit.

I would point out that -- and I think it was mentioned -- that one of the other challenges we need to look at, though, is codifying some of the actions we have already taken. NMSS, within IMNS, does do the rulemaking

1 to support security activities.

We need to be looking at that in terms of taking technical basis

developed by NSIR and putting those into the rules. That is something we

are working.

CHAIRMAN DIAZ: In the area of fuel cycle, there is going to be a significant potential change in which we are going to have to be looking at the front end, how the security is going to impact on those issues, and are we taking that into consideration as a cross-cutting issue?

MR. PIERSON: Yes, in fact we are. We are doing that with MOX, we're doing that with the gas centrifuge, and we will continue to do that with any other facility that we do.

CHAIRMAN DIAZ: Let me turn to the IMNS and the fact that you are now dealing with a series of expedited schedules as we look here -- the NARA rulemaking, the transition plan for newly defined byproducts, Chairman's task force on security of sources, national source tracking system, and so on and so on.

Are we maintaining a focus on how our employees are cross-trained in the different capabilities, and at the same time that we have enough manpower to be able to discharge these responsibilities well?

It seems to me that one of the issues that we always had was, when a new issue came in, we seemed to be able to have to move people from one place to another. And at certain times, that detracts from the effectiveness of the previously ongoing process. And we talk about the operational plan, and we talk about a lot of these issues really having to be discharged at the same time when the other maybe not so attractive in the present scale things are going on.

1	Can you bring me up to date on how you are doing those
2	things?
3	MR. MILLER: Well, as I mentioned, Mr. Chairman, one of the
4	things that we had to do in order to meet some of those aggressive schedules
5	is to ask for support from throughout the agency where expertise exists. We
6	have a lot of expertise throughout the agency, in other offices and in the
7	regions.
8	To get the initial rulemakings done, it required us to pull
9	together a task force.
10	In the NARM area especially, since we have not regulated this
11	before and the States have, we have really tried to engage the States to try to
12	get their insights. The Energy Policy Act has dictated that we, to the
13	maximum extent, utilize the States for that expertise.
14	In addition, you mentioned the cross-training. And that's a
15	continuous battle because in some cases, we have to take a depth of one
16	and build it into the depth of more than one.
17	To be able to do that, we have been very fortunate in that we
18	have had some extremely bright young talent that we have hired over the last
19	number of years, and they are coming up to speed very rapidly in supporting
20	the more senior staff in doing some of these endeavors.
21	The challenge that remains is not just to do the high-priority
22	rulemakings, but we have a number of other kinds of rulemakings in the
23	safety area that the Commission is continually interested in. The challenge
24	there remains to be able to continue to do those while still getting the extreme
25	high-priority rulemakings done.

There are times where our resources are stretched in that

1	regard, but as I mentioned earlier, our staff has been extremely flexible in
2	being able to adapt to that.
3	I think the biggest thing is, we have a lot of good technical
4	expertise. To become a rulemaker, though, requires some training and
5	requires some time, because there are a lot of administrative sides to
6	rulemaking.
7	What we are looking at is trying to further develop some
8	administrative staff to take some of the burden off of the senior technical staff
9	so the senior technical staff does not have to get involved in the day-to-day
LO	what I would call boilerplate activities and can devote more attention to
L1	overseeing the technical merits of the rulemaking activities.
L2	CHAIRMAN DIAZ: Thank you, Charlie. It just seems to me that
L3	as I keep hearing this, that one of these days, we might have to get together
L 4	and discuss effective strategies for rulemaking across the agency issue.
_5	MR. STROSNIDER: I want to make a very brief comment with
6	regard to cross-training because it's something we've talked about, and you'll
L7	hear it probably more today and also in our briefing next week.
L 8	I think, when we talk about that, one of the things we have to
L 9	recognize is that there is a certain investment that needs to be made there.
20	We talk about people either on rotational assignments or sending them to
21	different classes so they can learn that new expertise. We need to be
22	thinking, when we do that, how we plan for that and how we budget for that to
23	make it happen, because it does not come free. It is important to do, but it
24	will require some resources.

26 Commissioner McGaffigan?

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CHAIRMAN DIAZ: I understand.

Ι	COMMISSIONER MCGAFFIGAN: TII Start with something I
2	wasn't planning to say. You're looking across the table at a bunch of lawyers
3	and physicists and a nuclear engineer. The hubris of those folks feel that
4	they can be pretty flexible and do almost anything. You may want to make
5	sure you're recruiting a few of those folks if you want flexibility. You'd get
6	hubris with it, but We won't do lawyer jokes. There are fewer physicist
7	jokes than there are lawyer jokes.
8	CHAIRMAN DIAZ: All right.
9	COMMISSIONER MCGAFFIGAN: I have wasted 30 seconds
LO	here.
L1	I want to call the public's attention, really, to one of goals in our
L2	performance and in our budgets that we put up to the Congress yesterday.
L3	And that's zero high-risk sources being unrecovered in a year,
L 4	and that is a goal we have achieved the last four years. And, I believe, if you
L5	go back beyond four years, there was one iridium 192 source that has
L 6	long-since decayed below a high-risk level that was lost and unrecovered.
L7	But this is an aggressive goal. There is a lot of talk. And I'm
L8	afraid it may still be on our web page somewhere about the thousand sources
L 9	that get lost every year. And there we are counting tritium exit signs and
20	things like that. We are not counting high-risk sources controlled under the
21	Code of Conduct.
22	So we have an aggressive program here. I hope, if we have not
23	reflected this on our web page about high-risk sources and our source
24	program, that this goal gets incorporated there and this data gets
25	incorporated there because, too often, we are talking we mix tritium exit
26	signs with truly important sources.

was not here last summer, you guys were lucky for the budget review. My colleagues are particularly lucky.
colleagues are particularly lucky
colleagues are particularly lucky.
I notice that in other areas I pointed one that I'm very proud
of, but in other areas, we have goals, and we achieve far, far more than those
goals.
You can see 70 percent, and we're at 97 percent, and all that.
And I just give you fair warning, if I'm here for the next several years, I will
continue to press you to bring the goals more in line with the reality of our
accomplishments because at the moment, you can fall off very, very, severely
in accomplishments and still meet your performance goals. So just fair
warning.
MR. REYES: Our job is, we are going to dazzle with the FY-08
submittal. How about that?
COMMISSIONER MCGAFFIGAN: Oh gosh, dazzled.
CHAIRMAN DIAZ: Let me write this down.
MR. REYES: I think that is a legal term.
COMMISSIONER MCGAFFIGAN: Okay, dazzle. July 1st. I'll
put that in my tickler: dazzle on July 1st.
Okay. Turning to Mr. Pierson, you talked about trying to get
more risk informed in the area, and I do see at times in some of the products
of your office still a very large degree of conservatism. Sometimes I can see
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orders of magnitude in conservatism. I also know that there continues to be

Our view, as the Commission, is that that's OSHA's

- responsibility's, not ours. It is our licensees' responsibility, first and foremost.
- 2 They have an economic asset that they want to protect. And the chemical
- risks of our facilities are trivial compared to the chemical risks of other
- 4 chemical facilities that are operating in this country without a regulator.

But anything you can do to continue to try to get folks to wash out some of the over-conservatism is appreciated.

The area of reprocessing and related facilities, you have mentioned that. I'm concerned about getting on with that, as well. Clearly, it's been a long time since Barnwell and West Valley, and West Valley predates this Commission; it was the Atomic Energy Commission. Those licensing proceedings had to be exercises in exemption city or something because the Part 50 is the light water reactor rule, you know, how to license light water reactors, not how to license reprocessing facilities.

MR. PIERSON: I think it would probably be fair to say it is probably similar to what we would do if we issued one under an order today. You would essentially, for Part 50, you would exempt most of the general design criteria, and then you would create a new suite of requirements and issue them under some sort of an order, which would be an awkward way of accomplishing a licensing process.

COMMISSIONER MCGAFFIGAN: Yes, it would be rife with the possibilities of delays as you developed those criteria, as you went through the process. And every time you invented those criteria, you would end up probably having opportunities for late filed contentions and all of that. So it would be an absolute nightmare.

CHAIRMAN DIAZ: When is the paper that the staff anticipated

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1	MR. PIERSON: We have it written, and we are trying to
2	incorporate some of the provisions from the recent Department of Energy
3	issue. I have read it several times, and we'll be sending it up through
4	concurrence shortly. So it should be reasonably quickly.
5	COMMISSIONER MCGAFFIGAN: I have written a paper as well
6	on that, and we will see what the matching is between them when it comes.
7	One of my concerns and you mentioned it, and I will not go
8	longer is that it is not just a single facility; it is whole panoply of facilities,
9	vitrification facilities, fuel fab facilities, burner reactors. The question that
10	obviously arises is, we had this massive GESMO proceeding in the 70's that
11	terminated in December of 1977, after Barnwell was abandoned.
12	But the question is, when do we start a GESMO-like
13	proceeding? And I don't see how this time around, it will not be any less
14	massive than it was last time around. But it is premature to do it now, but the
15	question will be when.
16	CHAIRMAN DIAZ: All right, thank you. Commissioner
17	Merrifield?
18	COMMISSIONER MERRIFIELD: Mr. Chairman, I think I will
19	start off with a few comments. The first one is to Charlie Miller. I want to
20	compliment him, not just on the oral surgery appearance, but more
21	importantly, to me, you have been grappling, you and your staff, with a variety
22	of issues relating to the regulation of individuals in the medical community, a
23	group that has historically been, I would say, highly sensitive to our regulatory
24	approach. And I just want to compliment you, it is an area that requires a
25	great deal of sensitivity. We have been trying to reach out as a Commission
26	to that community to bridge some of our gaps, and I think you and your staff

1	should be complimented for efforts in that regard.
2	MR. MILLER: Thank you.
3	COMMISSIONER MERRIFIELD: To Jack Strosnider, the
4	Chairman mentioned the Radiation Source Protection and Security Task
5	Force. As you know, the Chairman has asked me to work with the staff and
6	oversee the day-to-day work of working with other members of the Federal
7	community and our staff to make that process work and meet the
8	expectations of Congress.
9	I just want to note and compliment this is an effort that
10	reaches, not just in NMSS, but brings in elements of Office of State and
11	Tribal Programs, and OGC, and a variety of folks in the agency. I want to
12	compliment them.
13	Obviously, we are still early in that effort, but I think a lot of good
14	work has gone in already, and hopefully that will present itself with a good
15	working product for submittal to the President and Congress.
16	Going to Bob Pierson. Obviously, you have got a litany of very
17	important issues you are working on, and I think you gave a very good
18	walk-through on some of those.
19	You mentioned that you got some new issues you had not
20	heard about last year on reprocessing, and you can put me down as the first
21	one to request a briefing on that.
22	You mentioned in-situ leach issues, the fact that there are a lot
23	of interested parties. The price of uranium is obviously connected with that.
24	As the author of the Commission Memorandum, COMJSM, that grapples with
25	those issue, I think the Commission, while it has not made its final choice, I
26	think we are closer to coming up to a resolution of providing some greater

1 vision as to how to move forward.

The only thing I would mention on ISL, given the fact that I think
your staff is very early on in the develop of a paper from an efficiency and
effectiveness standpoint, it might be worth waiting to sort of see what the
Commission's vision is before you spend too much time in that particular
area.

On the issue of -- you had a quote, and I wrote it down. Should we be involved in reprocessing or recycling? I think you were alluding to the fact that it is an open question about what DOE is going do and how we might be involved with it.

You and Jeff Merrifield – we are going to be involved. I think the expectation of Congress is that this type of technology requires independent regulators to oversee what is going on. I agree with Commissioner McGaffigan, we have got to be prepared to do that in the right way. So I am very much looking forward to reviewing the paper that your staff is coming up with.

I would note, these efforts before were not just related to West Valley, as was mentioned, which did predate our Commission, and Barnwell, which we were involved wit, it also included Morris, Illinois. Today, it serves as the largest off-site storage facility for fuel, which was an effort to try to build a reprocessing facility that, unfortunately, despite the good graces of one of our most significant Fortune 500 companies, which one of their companies, a Fortune 10 companies, didn't work. So I think having a regulator there will be quite important.

COMMISSIONER MCGAFFIGAN: It's a question whether West Valley ever worked either.

1	COMMISSIONER MERRIFIELD: On the issue of MOX, your
2	staff has been working quite hard on that one. We had a lot of fits and starts
3	with that, completely outside of our control, related to the difficulties that DOE
4	has had in managing that program. I'm wondering if you can comment a little
5	bit about how that has affected our ability to adequately oversee this program
6	and do what we need to do.
7	MR. PIERSON: I don't think it has affected our ability to
8	oversee this program. We have maintained essentially the core staff that is
9	available to do that work in the organization. So when the application comes
10	in and it is expected to be coming in probably in late summer, early fall of
11	'06 we will be prepared to do the review.
12	In most cases and I can give you a little bit of history about
13	the fuel cycle facilities – we had as a task to complete the integrated safety
14	analysis for the operating fuel cycle facilities, and we had to take people that
15	were doing that task and use them to do the gas centrifuge applications.
16	Now we are talking some of the MOX folks and using them to do the ISA's
17	and catch up on some of that, in effect, work that was lower priority work, and
18	we had to set it aside for a period of time.
19	So we still have the people. They are gainfully employed, and
20	they are still working on the issues. And my feeling is, when we get the
21	application, we should be able to jump right in and do it.
22	We are still working with the Department of Energy, we are still
23	working with the applicant. We are identifying technical issues. We are
24	trying to develop a risk model for several of these significant events, like
25	Hand, Red Oil, and some of these others, so we can come out with some sort

of a risk process model to understand which variables have the most impact

on that, and ensure that when we do the review, that we have adequate items

2	for safety to protect against them.
3	COMMISSIONER MERRIFIELD: I appreciate that. And
4	certainly in my question, I didn't mean to at all question in my own mind the
5	adequacy of our staff review. It was really going the issue of, how do you
6	manage a process when you have swings back and forth from an applicant
7	that you can't predict. That creates a challenge for us.
8	I said repeatedly in the past, and I will repeat it today, DOE has
9	a ways to go to learn how to be a licensee, and obviously, we will have to
10	continue to work on that one.
11	MR. PIERSON: There are international issues, too, associated
12	with this.
13	COMMISSIONER MERRIFIELD; I understand there are a lot of
14	different data points.
15	Mr. Chairman, I'll have other questions, but for now, I'll set them
16	aside.
17	CHAIRMAN DIAZ: Commissioner Jaczko?
18	COMMISSIONER JACZKO: I just wanted to start off with a
19	couple of comments. Jack, you may have I forget who made the comment
20	that guidance development, I think, is not a priority. I think that is certainly
21	something that, at one of the very first Commission meetings I was at, I
22	raised the issue, more on the reactor side, about making sure we update our
23	infrastructure and get our guidance up to date. And I'll perhaps reiterate the
24	request that I made at that time, that often, these things come down to
25	budget constraints.

I would encourage you to continue to let the Commission know

- what your budget needs are in that area, so that those kinds of things don't
- often get left to the low-end of the priority scale in budgeting. I understand
- that's often what happens if you have priority work that needs to get done for
- 4 a licensee that those things take priority and preference. So I certainly would
- 5 reiterate that request. Perhaps that will be part of the dazzling that we will
- 6 see later.

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I wanted to follow up on something that Chairman Diaz had talked about a bit about the variety of rulemakings that are going on right now in the office.

One that I think is important is a lot of very tight Congressional time lines for these rulemakings. Perhaps if you could comment a little bit. I was thinking in particular about the NARM rulemaking, what kind of efforts you are engaged in to ensure that we're getting appropriate stakeholder comment, because that is one that seems in particular, a lot of people are used to dealing with these materials and dealing with these things in hospital settings and these kinds of settings, where they are perhaps not prepared for the fact that things may change where they have a very different type of regulator involved. So if you can talk a little bit about how we are working to get stakeholder comment on that.

MR. MILLER: Commissioner, the first thing we did, as I mentioned earlier, is that we established a task force where we invited the Agreement States and the CRCPD to participate so that we would capture both the Agreement State views and the non-Agreement State views.

Secondly, this past November, we held a public forum roundtable discussion in the ACRS meeting room where we invited States, other Federal agencies, key stakeholders, for example, from the medical

1	community who were extremely interested in a NARM rulemaking, to
2	participate in a roundtable discussion so that we would solicit their views.
3	Thirdly, we held a
4	COMMISSIONER JACZKO: Are you getting a lot of these
5	same groups now, and are they providing comments?
6	MR. MILLER: Their next stage for providing comments, I think,
7	will be when we publish the proposed rules.
8	COMMISSIONER JACZKO: Are they getting prepared do that?
9	MR. MILLER: Absolutely. We have some groups that are really
10	chomping at the bit and really want to provide comments. There is a lot of
11	anxiety out there on the part of some of these stakeholders, especially in the
12	medical area, because they want to make sure that whatever regulations that
13	we promulgate, that it does not interfere with the flow of radio
14	pharmaceuticals in patient care. We have tried to really pay close attention
15	to that as we formulate our proposals.
16	COMMISSIONER JACZKO: Thank you. I want to turn to an
17	issue that, again, I think is one of the very first issues that I become a little
18	involved in when I started here, and that has to do with how we are going to
19	handle category 3 sources in the various rulemaking activities that we have,
20	in particular with National Source Tracking.
21	I know that the staff you indicated that the staff is preparing a
22	paper that will describe how we deal with below category 2 sources. It's good
23	to see if that paper will come a little bit before we get a final paper on the fina
24	rule for the National Source Tracking. I certainly think it is important, and I
25	have gone through some of the comments on the rule.

It seems there are a mix of comments, some indicating support

- for including category 3 at this stage; others certainly have raised some
- 2 questions about how we incorporate category 3 sources at this stage of the
- 3 rulemaking.
- So I certainly am very supportive of things we can do to include
- 5 at least some portion of category 3 sources right now. So I would certainly
- 6 look forward to the paper that will come on that in ways that we can continue
- 7 to improve that rulemaking in that area.
- 8 CHAIRMAN DIAZ: Thank you.
- 9 Commissioner Lyons?
- 10 COMMISSIONER LYONS: Let me start by commending the
- staff. Jack, I very much appreciated it as you went through the list of
- accomplishments from NMSS in the last year. It is an impressive list;
- everything from the uranium enrichment work, the MOX work, the progress
- on NSTS, and any number of other areas. You have my compliments. It's a
- diverse list, and it is very, very impressive,
- 16 MR. STROSNIDER: On behalf of the staff, I will say thank you.
- 17 COMMISSIONER LYONS: Maybe a comment and questions,
- Bob, particularly related to your slide 10. Your slide 10 is -- it's not very many
- words, but the number of challenges encompassed in slide 10 is almost mind
- 20 boggling. And I appreciate the way you went through it. I very much concur
- with your comments that we need to be looking at improving our regulatory
- 22 framework in some of these areas.
- You mentioned, on recycling, perhaps looking to do a new Part
- 24 70. I very much concur with that.
- On the in-situ leach mining, I appreciate what you said and the
- work that Commissioner Merrifield has been doing in trying to suggest ways

- that we can move ahead with a new regulatory structure there, too. In all of
- these areas, I very much concur with you that we are going to see immense
- 3 continuing and new challenges.
- I guess the question I might ask: You already referenced the
- 5 range of skills that are required in these very diverse, different types of
- 6 facilities.
- 7 I was curious whether we have these skills in house, or whether
- 8 you are finding that you need to be working with HR and recruiting new talent
- 9 in some of these areas?
- MR. PIERSON: It's both. In some cases, we have the skills in
- 11 house. For instance, we have criticality engineers. We have people who are
- learning about plutonium criticality issues, but we don't have what I guess I
- would call someone with a lot of field hands-on experience working with
- plutonium criticality calculations. In the area of ground water hydrology, it is a
- constant challenge. We do have people in house with that skill, but we are
- constantly needing to bring in new people.
- In the area of plutonium chemistry, that is probably the area
- where we are the weakest. I suspect we will have to go outside of the agency
- to hire that, but we are trying internally. We have a solicitation of interest,
- that we are looking for someone with the skills that would be knowledgeable
- in that area. We are also using outside expertise in some of these areas to
- 22 help us out. In some cases, assistance from National Labs; in some cases,
- 23 working with people that -- recently retired annuitants that come back and
- provide us some assistance in these areas. So it is a varied mix.
- MS. FEDERLINE: Sir, could I just ask, from the office
- 26 perspective. We are looking at trying to recruit for these special skills. We

- 1 have a recruiting champion in the office. Tom Essig is our recruiting
- 2 champion, and each of the SES have identified a university and are
- establishing relationships with that university. So we are trying to predict
- 4 early what skills we need and establish pipelines so that we will have sources
- 5 of recruiting those people.
- 6 MR. REYES: This is a dual-pronged approach. The staff may
- be looking for the expertise outside the organization, but sometimes that is
- 8 very difficult to do. And we have a plan B, which is, we are trying to grow our
- 9 own. So we are going to some of the colleges and universities and get some
- bright minds with the right background, where we can start training them. So
- we try to make it a dual-pronged approach and not use only one strategy.
- 12 COMMISSIONER LYONS: I think that is very important. I have
- a question for Charlie, and it will spill over to Janet, too, in State and Tribal
- 14 **Programs**.
- 15 I was curious: As we see the number of Agreement States
- potentially increasing, there will be more and more challenges in the funding
- bases that we use for many of the skills that are required.
- 18 I was just curious about comments from Charlie or Janet on
- 19 how we might evolve the funding base for some of these essential skills as
- the number of Agreement States ramp up?
- 21 MR. MILLER: I want to make sure I clearly understand where
- 22 you're going, Commissioner Lyons. As we get more Agreement States, then
- functions will shift from our regulation of these licensees to the Agreement
- 24 States.
- However, we still have to maintain the skills with regard to the
- Federal oversight, because we put the Federal standards in place that the

Τ	States would be compatible with, to whatever degree of compatibility they
2	need to be on any particular rule.
3	COMMISSIONER LYONS: But the funding base will shift to the
4	States.
5	MR. MILLER: The funding base shifts more to the States in tha
6	regard, but we have to maintain some funding base to be able to keep the
7	regulatory structure. In addition, we have sole jurisdiction for the Federal
8	facilities, and we will still have to regulate licensees that are Federal in nature
9	even if they were 50 Agreement States.
10	COMMISSIONER LYONS: What I'm really leading up to is, are
11	we giving some thought to the potential of moving more of those national
12	support functions to an off-fee basis?
13	MR. MILLER: Yes, we are. I think what we have to do is, we
14	recognize as the number of licensees shrinks that we regulate, then the
15	licensee that are left start paying disproportionate amounts of fees compared
16	to a larger number in the historical past. So we have to think about how to
17	deal with that. And that's one proposal.
18	COMMISSIONER MERRIFIELD: I think this is something the
19	Commission has challenged the staff on. You raise an excellent point, but it
20	is something we have challenged them on for a long time.
21	How do you come up with and I think the staff has done a
22	better job of understanding this. What is the core series of functions you
23	would need, even if you assumed that every State became an Agreement
24	State? That core function is ultimately what you would have to have funded
25	off the fee base in order to maintain our capabilities. And the staff has put a

lot of thought to that over the years.

Ι	MR. MILLER: One thing I neglected to mention also is that part
2	of that core function will be, if there are more Agreement States, then that
3	means more IMPEPs. So we have to have part of our core function to be
4	able to support the IMPEP process also.
5	COMMISSIONER MCGAFFIGAN: I might chime in also. I think
6	we are historically in the best shape we have ever been in, in programs off
7	the fee base, because Congress and the EP Act (Energy Policy Act) took
8	security off the fee base. And so you take security, plus the ten percent
9	Congress previously put off the fee base, and it's close to there was a
LO	calculation once made, but it's close to a fair allocation.
L1	We can always ask the staff to go back again as Commissions
L2	have done since Chairman Selin was Chairman and figure out whether we
L3	are being fair to our licensees and fair in terms of what the American taxpayer
L 4	should be paying. But there was a huge step in the right direction in the EP
L5	Act by putting security, other than inspections and whatever, in licensing, into
L 6	the general fund.
L7	COMMISSIONER LYONS: All right. That's all for now.
L8	CHAIRMAN DIAZ: Thank you. I don't have any additional
L 9	questions. Commissioner McGaffigan?
20	COMMISSIONER MCGAFFIGAN: I will just start with one
21	which was provoked just a short while ago.
22	Looking to the National Labs for expertise and this to Mr.
23	Pierson on things like plutonium chemistry, you may find yourself with these
24	conflict-of-interest issues, and they may become pretty palpable at that point
25	because as I look forward to look at the possibility of licensing in that area,
26	the most likely licensee is the Department of Energy or a government-charted

1	corporation, in my view. I see calculably zero interest in the private sector,
2	and in the taking all the risks involved in being a pioneer in all these new
3	technologies, so you will have bow careful there.
4	MR. PIERSON: Yes, sir.
5	COMMISSIONER MCGAFFIGAN: Going back to the
6	rulemaking area, the list is very long in your area, Charlie. Others have made
7	that point. One of the ones is not necessarily a provision that I was wild
8	about that we have to execute is Section 656. There is a rulemaking required
9	to decide what material to exempt from Section 656.
LO	I think some day, we may use the term "non-exempt Section
L1	656 material" widely in our transportation rules and regulations. But are you
L2	on track to giving us an exemption rulemaking, a listing of the types of
L3	material and the types of licensees that should be exempt from the Federal
L 4	agency background check requirements that are in Section 656 in order to
L5	meet the final rule deadline set by Congress of August 8th?
L 6	MR. MILLER: I'm going to ask Scott Moore to come to the
L7	microphone. He is the Chief of the Rulemaking Branch to augment what I
L 8	say.
L 9	COMMISSIONER MCGAFFIGAN: He is coming to augment,
20	but keep talking.
21	MR. MILLER: Here is what I'm talking about.
22	COMMISSIONER MCGAFFIGAN: Is my time up?
23	MR. MILLER: It is an extremely aggressive schedule, and it is
24	extremely difficult to meet. One aspect of it, of course, is to go through the
25	OMB review and clearance process, which typically takes 75 days. We don't

have control over that.

1	COMMISSIONER MCGAFFIGAN: Why is there an OMB
2	paperwork collection requirement for deciding which materials to exempt?
3	MR. MILLER: Maybe I'm confusing the rulemaking.
4	MR. MOORE: I can address this. I'm Scott Moore, Chief of the
5	Rulemaking Guidance Branch in NMSS. The rulemaking requires us to pass
6	exemptions, but it also requires background checks to be performed by
7	Federal entities. So we would have to enact some requirement that would
8	require background checks by Federal entities.
9	So we would probably have to go over to OMB and have OMB
10	pass the background check portion of it.
11	We would not have information collection by OMB; it would be
12	the background check. So OMB would not approve the rule, it would be the
13	background check information collection portion by OMB.
14	As far as your question about the timing, Commissioner
15	McGaffigan, we are on time to meet the March date for the proposed rule, but
16	because of timing for the public comment period and going to OMB, unless
17	we can get OMB to waive some of the timing requirements, we will not be
18	able to meet the August Congressional date. So we will have to come up and
19	brief the TA's about options to hit the August date in the rule.
20	COMMISSIONER MCGAFFIGAN: I don't have the provision
21	right in front of me. I'm glad you are dealing with both parts, the requirement
22	for a background check for nonexempt material. By the way, this will include
23	Agreement State licensees and carriers, in addition to NRC licensees.
24	But people are going to have the background checks in
25	nonexempt material. But the nonexempt material part of it, you can do in one

1	material stuff, which does not require OMB, and then partition the second
2	part to meet a later deadline. You may want to consider that when the time
3	comes. Thank you.
4	CHAIRMAN DIAZ: All right. Commissioner Merrifield?
5	COMMISSIONER MERRIFIELD: The Commission, this goes to
6	Bob Pierson, the Commission committed to trying to achieve a 30-month
7	timeline for review of the centrifuge facilities we have before us right now.
8	Without going into the details of the individual applications, how are we doing
9	on that?
10	MR. PIERSON: We are meeting the intermediate milestones
11	for the schedule, and we appear to be meeting the 30-month time schedule,
12	with time to spare, I think.
13	There are a couple of issues that could come to haunt us, but
14	some of them are a bit outside of our control in terms of depleted uranium
15	disposal and that sort of thing. But it looks like we are on track to do that.
16	COMMISSIONER MERRIFIELD: The backup slides that you
17	presented indicated that there is a an intention to do a Part 40 rulemaking in
18	'06 regarding uranium conversion facilities and requiring the submission of an
19	integrated safety analysis and management program.
20	Besides the Honeywell facility in Metropolis, how many other
21	facilities would be affected by this rulemaking?
22	I guess one of reasons I'm probing here is, there is obviously an
23	issue of financial burden, cost benefit analysis of moving forward with that
24	kind of rulemaking. And I also wonder, currently, there are under Part 40
25	obviously, Part 40 is a very complex regulation with really a variety of different
26	facilities, and we are looking, I guess, at adding some more requirements,

1 which look more like Part 70.

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So I'm wondering, does it make more sense to be working on the Part 40 part, or do we make changes to Part 70 to incorporate what we 3 need to do relative to Honeywell? So if you would sort of walk through some of the pros and cons.

MR. PIERSON: Currently, today, we have one conversion facility, as you have mentioned, and that's the Honeywell site.

If you look at the increase in uranium mining and you look at the increased utilization of uranium, somewhere in world, there is going to have to be a conversion facility built.

We are not going to go probably much more than, say, five to ten years before that will be a significant bottleneck with respect to the uranium process industry, not only in the U.S., but the world.

If you look at the market, one would conclude that it's most likely to be developed in North America. So the real question is, if there is a conversion facility, is it going to be built in Canada or the United States?

My sense is that it's probably leaning a bit more favorably toward the United States now than to Canada.

So I would expect one of two things to occur: Either the Honeywell facility will expand to increase their capacity, which would involve some license amendment or significant upgrade, or they or some other party will come through and build another conversion facility. It could be associated with the uranium -- I guess what we call de-conversion facilities, where at LES they're talking about getting rid of the depleted uranium by building a de-conversion facility and converting it back to uranium oxide for ultimate disposal. It could be associated with something like that.

1	The problem with conversion facilities is that, in the case of
2	Honeywell and, at the time, Sequoyah, those facilities were specifically
3	retained under NRC jurisdiction. They should be in consideration for an
4	Agreement State oversight.

So we are left with an issue here. If we move forward without some sort of rulemaking framework to address a new facility, we could have another facility coming on line that we would want to have additional safety enhancements, compared to what we allowed when the Honeywell site was licensed. And it may not even be under NRC jurisdiction, it may be under an Agreement State, if the decision were to allow an Agreement State to do this.

So an Agreement State would essentially be trying to license a facility with very minimal, sketchy guidance from the NRC because, in the case of Honeywell, what has happened over time, effectively, say, the last ten to fifteen years, the site has come forth, most of the time voluntarily, working with staff, to decide to put its provisions, license conditions, to assure the safety -- I guess I would call it the safety envelope for the site.

You can't always be assured that any future applicant would necessarily be as willing, nor can you assure that a State would be able to implement that kind of a process, as we have developed and built up over the years.

So we would like to see some sort of rule process to allow a more orderly and predictable thing for what I think is likely to be a conversion facility some time in the future.

As far as the conversion site, I want to stress, if we maintain the Honeywell site and we don't expand beyond that, it probably would not be useful to do a rulemaking for that because I think they've achieved through

1	license condition and process the safety envelope that we need.
2	COMMISSIONER MCGAFFIGAN: Can I follow on, just as a -
3	COMMISSIONER MERRIFIELD: Can I first. I got a lot more out
4	of that question than I expected, although I'm glad I asked the question. And
5	I guess I have got two specific reactions.
6	I think this is one you've got to keep the Commission informed
7	about, and I think you know a lot more I learned a lot more today than I
8	would have expected.
9	MR. PIERSON: That information is included in our paper that
10	we are planning to send forth.
11	COMMISSIONER MERRIFIELD; But the issue, as it relates to
12	Honeywell, I think this Commission at various points has said, we have a
13	discomfort about placing the burden, from a fee standpoint, on a single
14	licensee, if there are other folks who are going to take the benefit of that
15	regulatory process. I assumed the paper is going to
16	MR. PIERSON: The paper, Commissioner, takes a statement
17	that you made at the Advisory Committee on Nuclear Waste, where you
18	entertained the idea of off-fee base, and we're incorporating that in the paper.
19	COMMISSIONER MERRIFIELD: Let me just say the other one.
20	I heard you opining about the roll, vis-a-vis States. And I don't want to get our
21	State folks annoyed. I think we have a very good relationship with the
22	Agreement States.
23	My personal Jeff Merrifield view is, this a fuel cycle facility. If
24	there needs to be some action by Congress to make sure it stays within our
25	envelope, it does not make any sense to me to have such a complex facility
26	go over to and have to have the State, wherever it is chosen, go through

1	the whole process of trying to create what we already have here. I personally
2	think that if we need to seek Congressional redress
3	MR. HOLONICH: I think that
4	COMMISSIONER MERRIFIELD: I hope that's part of your
5	paper.
6	MR. PIERSON: I think the Commission can make that decision.
7	That's what was done with the case in Sequoyah.
8	COMMISSIONER MCGAFFIGAN: I don't see the ambiguity in
9	current legislation that you apparently see. I think it's absolutely clear that a
10	new conversion facility would be regulated by the Nuclear Regulatory
11	Commission and not by the States.
12	CHAIRMAN DIAZ: Commissioner Jaczko?
13	COMMISSIONER JACZKO: Just again, this is to follow up a
14	little bit on where we are with national source tracking.
15	One of the desired end states of the Domestic Nuclear
16	Protection Office is to have what they call real-time information or alarm
17	reporting from a domestic architecture in place by 2007. I think someone
18	briefly indicated something to that extent.
19	I'm wondering if you can tell me right now, will the national
20	source tracking system have the ability to expand to deal with that kind of
21	ability in the future, or is the architecture right now such that that would need
22	to be a different system?
23	MR. MILLER: Commissioner, have Dr. Patricia Holahan at the
24	microphone. She is my point person on the National Source Tracking
25	System.
26	DR. HOLAHAN: Trish Holahan, IMNS. Commissioner Jaczko,

- 1 yes, the system is expandable to be able to address what we are anticipating,
- but we have an interagency coordinating committee, and we are interacting
- with DNDO. As recently as last week, we went out to the testing facility and
- 4 saw what they were doing. And we're envisioning what they can do with the
- 5 National Source Tracking System.
- We are going to make it available to DNDO through security
- 7 provisions. But, we are going to make it available. I think the system is
- 8 expandable enough to be able to include sources that DNDO would like to
- 9 have.
- MR. STROSNIDER: Trish, please correct me if I'm wrong, but I
- think you said -- I think there is a challenge. If you take this to what I'll call
- one end of the spectrum or the extreme of, let's say, for example, real-time
- tracking, the system right now does not include the notion of, here's where
- the source is at any given time. Although we might have the capability to
- expand it to do that, there are a whole lot of other issues that go with that.
- That would be a very challenging thing, I think, involving
- technology and a lot of other things. But it is something that I think the group
- is aware of and a part of their discussions.
- DR. HOLAHAN: And with the ICC, we have a subgroup on that,
- which is dealing with this, and DHS is leading that subgroup, and they are
- 21 dealing with real-time tracking. But it's not envisioned right now that it would
- be part of the National Source Tracking System. But they are providing
- options, and it is going to feed into the Chairman's task force eventually --
- 24 what they are doing.
- 25 COMMISSIONER MERRIFIELD: I could just -- This was an
- issue that was brought up in a meeting that we had with the Organization of

- 1 Agreement States and CRCPD, when they met with the task force, and there
- were very strong views articulated by the states, that trying to go to that level
- of tracking on a real-time basis does not make any sense.
- If you wanted to track every smoke detector in the United
- 5 States, that does not make any sense at all. I think that was something that
- 6 was reflected from the States. My sense is, that is something that may feed
- 7 in further thought processes at DNDO. How that comes together where we
- 8 are, I think, is probably an open question, as Trish has explained.
 - CHAIRMAN DIAZ: Commissioner Lyons?

- 10 COMMISSIONER LYONS: I think my question will probably go
- most to Janet, although, Charlie, you may want to chime in, too. But I was
- curious whether the States that currently regulate NARM are expressing an
- interest in obtaining full Agreement State status, or are they interested more
- in a limited status just covering NARM? And I was also curious whether the
- staff was exploring an expedited process for adding NARM to the existing
- Agreement States. I'm guessing that's more Janet than Charlie.
- 17 MR. MILLER: Let me start, and I will let Janet augment.
- We know of some selected States that are interested in
- pursuing Agreement State status in fairly near term. As far as I understand,
- 20 that is full Agreement State status that would encompasses NARM.
- With regard to some expedited mechanism, part of what you will
- see in the policy papers that we sent up that goes along with the transition
- 23 plan, will be the mechanism by which there is a very quick adaptation on the
- part of Agreement States to be able to pick up NARM without a lot of extra,
- what I would say, headaches on the part of the Agreement States. They
- 26 have the programs to do it.

1	I don't anticipate that will be a major problem for Agreement
2	States. I think the issue on the table is for those non-Agreement States that
3	we have not heard from; what will they do? Will they want to seek full status,
4	or will they try to seek a more limited status? Depending upon which path
5	they take but there are different pluses and minuses with each of those
6	approaches.
7	COMMISSIONER LYONS: Janet, could you add anything to
8	that?
9	MS. SCHLUETER: Janet Schlueter, Director of State and
10	Tribal Programs. I think, to the most degree, we are seeing non-Agreement
11	States express some interest in a full agreement. I think the interest in a
12	limited agreement is limited.
13	We use our regional State Liaison Officers to be the first line of
14	communication in many cases, and so they are routinely opening up
15	discussions with the non-Agreement State Radiation Control Program
16	Directors and the State Liaison Officers to determine what is the interest level
17	in non-Agreement States to entering into an agreement.
18	With regard to efficiency in the process, we in State and Tribal
19	Programs are looking internally to our STP procedures to see, perhaps, are
20	there efficiency gains in the review process we have in place for looking at
21	reviewing and making our determinations on an application for an agreement.
22	I think that there are efficiency gains to be made there, not only
23	just in the administrative housekeeping areas, but, for example, in the event
24	that we have an application that raises a potential policy issue, one thing we
25	would like to put into our procedure is that there would need to be a
26	conscious decision made with regard to whether or not the policy issue can

1	be addressed separate and distinct, and in parallel to processing the
2	agreement, rather than sequentially. So that is a fundamental issue with
3	regard to the process.
4	We are also looking at, what can we do to provide more helpful,
5	useful, plain English guidance and assistance to those non-Agreement States
6	that may want to enter into an agreement.
7	We are looking at developing a tool box on our website for how
8	to become an Agreement State, putting some readily available, plain English
9	information there; other ways to communicate that to the States, including we
10	are looking at developing a poster session for the annual CRCPD meeting in
11	May.
12	So we are looking at different tools, different mechanisms that
13	we can get the word out and work with those non-Agreement States that may
14	have an interest and add some more transparency to the process, look for
15	efficiency gains, and communicate with them.
16	We have, of course, the Virginia letter of intent. Pennsylvania's
17	application could come. We have been in discussions with Michigan; no
18	letter of intent there.
19	Through our RSLO's, have learned there is some activity within
20	the state legislatures of both Connecticut and New Jersey for letters of intent.
21	So those could be coming down the pipeline. We could have this relatively
22	large bow wave of potential applications. So this has necessitated us to look
23	at efficiency gains.
24	COMMISSIONER LYONS: Thank you both.
25	CHAIRMAN DIAZ: Well, thank you very much.

I now have the pleasure of thanking the staff, not only for the

1	presentation but for the work that they do.
2	I really appreciate all of the things that we know you do; some
3	that we see and some that we don't see. I know there are things you do
4	every day that don't come to our level but that are actually fundamental to the
5	way the agency works. And for that, we thank you.
6	If my fellow Commissioners realize that we have already run
7	over the time and there are no additional comments, then we will
8	MR. STROSNIDER: If I could, Mr. Chairman.
9	CHAIRMAN DIAZ: Yes, sir.
10	MR. STROSNIDER: I do want to thank the Commission this
11	morning for the time that the staff takes a lot of pride in these programs,
12	and we appreciate the opportunity to come and present them. I want to
13	acknowledge the staff, not just within NMSS, but within all the offices that
14	helped us do this assessment and prepare for the presentation. So we look
15	forward to next week.
16	CHAIRMAN DIAZ: I certainly appreciate that. When I made my
17	opening remarks, I said this maintains the Commission fully and currently
18	informed, it informs the public. The reality is that this is a mechanism in
19	which we actually can get to see and recognize the work that the staff does.
20	With that, we are adjourned.
21	(Whereupon, the proceedings were adjourned.)
22	